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ORIGINAL

PUBLIC SERVICE SCIENCE RESIDENCIES

CLOSING DATE FOR
SUBMISSION OF APPLICATIONS:
FEBRUARY 15, 1979
ANNOUNCEMENT OF AWARDS:
MAY 1979

NATIONAL SCIENCE FOUNDATION
SCIENCE FOR CITIZENS
OFFICE OF SCIENCE AND SOCIETY
WASHINGTON, D.C. 20550

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Office of Science and Society

The National Science Foundation has established the Office of Science and Society to respond to the problems arising out of the changing relationship between the scientific and technological communities and the larger society. The general purpose of the Office is to bring about greater understanding of this relationship and to help in solving important ethical and social issues connected with science and technology.

In pursuing this purpose the Foundation seeks to respond to such questions as:

- How can the work of scientists and engineers, and the implications and consequences of their work, be clarified for the public?
- How can citizens who are not themselves scientists participate effectively in deciding issues of public policy that have important scientific and technological components?
- How and by whom are decisions made about the direction of scientific activities and the resources invested in them, and how should these decisions be made in a democratic society? Against what ethical and social standards can and should such decisions be judged?

Each of the Office of Science and Society programs approaches these questions in different ways. The primary focus of the Public Understanding of Science (PUOS) program is on improving the content and processes of communication between the scientific and the nonscientific communities. The primary focus of the Ethics and Values in Science and Technology (EVIST) program is on identifying, understanding, and helping to resolve the ethical and social dilemmas that arise in the work of scientists and engineers and in their interaction with citizens affected by their work. The primary purpose of the Science for Citizens (SFC) program is to increase the knowledgeable participation of both scientists and nonscientists in the resolution of major public issues involving science and technology.

For further information about these programs, write to:

Office of Science and Society
National Science Foundation
Washington, D.C. 20550

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PUBLIC SERVICE SCIENCE RESIDENCIES

The objectives of the Public Service Science Residencies program are:

- to increase the knowledgeable participation of scientists and citizens in resolving major issues of public policy that involve science and technology;
- to make scientific and technical assistance available to citizens and their organizations and representatives, at the times and in the ways most useful to them; and
- to encourage scientists and engineers to participate in public service activities as an important adjunct or alternative to traditional scientific and academic pursuits.

GENERAL DESCRIPTION

Public Service Science Residencies are intended to allow working scientists and engineers to undertake up to a year's activities in association with organizations of citizens in need of their expertise. In conjunction with their host organizations, residents must design a specific project or program of activities directed at helping citizens who normally lack access to scientific and technical assistance. Up to 40 Public Service Science Residencies will be awarded in May 1979.

Residents' activities may be undertaken on a part-time or full-time basis. The activities should make specific use of the residents' scientific and technical expertise. They should help the public, as well as the particular constituencies of the host organization, to reach informed decisions and to participate effectively in the policymaking process on issues involving science and technology that have a direct impact on their lives. The results of the activities should be broadly and impartially disseminated, so as to reach the widest interested audience.

Applications may be submitted either by individuals who have identified an appropriate host organization, or by organizations that have identified a particular scientist or engineer desiring to serve as a resident. In either case applications should be submitted for a specific individual, whose qualifications will be evaluated as part of the review process. Organizations may wish to get in touch with colleges and universities and other local sources of scientific expertise to identify potential candidates.

Appropriate host organizations include community groups, public interest organizations, professional or trade associations and trade unions, units of state and local government, educational institutions (such as a public library, museum, or college with a community outreach program), or other organizations which: (1) are operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest; (2) are not organized primarily for profit; and (3) use all income exceeding costs to maintain, improve and/or expand their operations. Applications from or on behalf of persons proposing to continue their association with an office or program in which they are currently employed will not be accepted.

Whether submitted by an individual or an organization, the project plan should be developed with the cooperation of both parties in order to insure that: (1) the resident's skills and knowledge are suited to the project; (2) the project meets the needs of the host organization and its constituencies; and (3) adequate dissemination and follow-up activities will be undertaken.

RESIDENCY ACTIVITIES

Appropriate projects for residents to undertake include (but are not limited to):

- short-term, small-scale research on specific scientific problems associated with current issues;
- data collection, compilation, and dissemination;
- analysis of scientific and technical documents;
- informal science education activities for adults, such as seminars, workshops, and public lectures;

- development of handbooks, newspaper articles, TV and radio programs, museum exhibits, etc.; and
- expert advice addressed to the scientific needs of citizens and their organizations and representatives.

Residents are expected to undertake the independent and objective appraisal, development, interpretation, or dissemination of scientific facts, conclusions, and options relevant to public policy issues in which science and technology play an important part. Applications must show how residents will use their specific scientific and technical expertise during their tenure, emphasizing the relevance of their scientific qualifications to the issues addressed in the proposal.

Residents' work is expected to meet high standards of scientific objectivity and merit. There should be a clear delineation between their scientific statements and work and the policy statements or politically-oriented activities that may be undertaken by the host organization. Although a host may base its policy statements on work produced by a resident, the resident should not make policy statements on behalf of the host and should not organize activities that advocate a particular resolution of an issue.

Materials and educational projects developed by residents must be balanced so as to present fairly all important points of view on the issues being discussed. All materials produced by residents during their tenure are expected to be made widely available to the public; applications must show that the results of the proposed activity will be disseminated so as to reach all parties with an interest in the issues in question. An acknowledgment of NSF support and a disclaimer must appear in all publications and printed materials.

Priority of consideration will be given to applications in which the proposed activities are intended to reach groups that normally do not have access to scientific expertise and information: minority groups, the poor, those with little formal education, and the organizations that represent them and work to meet their needs. Applications should identify the groups toward which the activities are addressed, specifying the audience that is expected to participate in or benefit from them.

Applications should provide for the evaluation of the activities, during and after the residency, to determine the effectiveness of the resident and the host organization in meeting their stated objectives. Where appropriate, follow-up activities to be undertaken by the host should be described. The application should outline any plans by the host organization to continue the outreach and dissemination activities initiated as part of the residency.

Proposals for activities involving expertise that is primarily legal or political rather than scientific in nature will not be considered, nor will proposals for activities intended to promote a particular technology or provide support for already-determined policy positions of individuals or organizations. The development of scientific conclusions that may be used to support a particular policy is an eligible activity, but an application primarily directed at helping an organization develop its own policies will not be favorably considered. Projects will not be considered whose primary purpose is to engage in private study or writing, to market particular products, or to develop curricular materials for use in formal educational instruction.

In accordance with the Joint Explanatory Statement of the Committee of Conference of the U.S. Congress on the NSF Authorization Act for 1978, no awards will be made to applicants requesting support solely or principally for the purpose of intervention in any judicial or administrative proceeding by contesting any action or decision before any court of law or Federal, State or local executive agency or instrumentality. Awards will not be made to applicants who intend to associate with host organizations solely or principally engaged in such activities unless those applicants clearly assure the objective nature of their research and their intention to disseminate their results equally to all parties.

ELIGIBILITY

Public Service Science Residencies will be offered to persons with appropriate qualifications in the mathematical, physical, biological, medical, engineering, or social sciences (including the history and philosophy of science), or in interdisciplinary fields (e.g., environmental sciences, science education).

Residencies will be offered only to persons who have earned, or will have earned by the beginning of their tenure, a Ph.D. or the equivalent final professional degree in their field (e.g., D.P.H., Ed.D., M.D.), or have acquired comparable professional experience and qualifications in an eligible field. Applicants who have just received a Ph.D. should provide evidence of additional professional experience wherever possible. Master's level applicants will not be granted awards unless they demonstrate that their professional experience qualifies them to compete with applicants holding Ph.D. or equivalent degrees.

TENURE

The tenure of a Public Service Residency may range between 3 and 12 months. The residency may be interrupted provided that no single period of tenure is less than 3 months.

Residencies may be undertaken on a full-time or part-time basis. A full-time commitment is interpreted to mean approximately 40 hours or more per week. Applicants who propose a part-time residency must commit a minimum average of 10 hours per week to the activity.

Recipients of awards must begin their tenure within 16 months and must complete their tenure within 30 months after the award is made.

Exceptions to these policies may be made by the Foundation if sufficient reason can be shown.

STIPENDS AND ALLOWANCES

The offer of an award in this program is in the form of a formal grant to the individual applicant. The Foundation will provide a stipend and a travel allowance to the resident, and an activities support allowance to the host organization. Additional information on stipends and allowances will be sent to residents and their host organizations at the time awards are made.

Stipend. Stipends wil be prorated according to the length of tenure. The minimum stipend granted to a full-time resident is $18,000 per year, or $1,500 per month. For those whose current income is in excess of $18,000, the Foundation will match the applicant's annual base pay as of May 31, 1979 (including regular salaries, fees, and academic pay), up to a maximum of $25,000 per year, or $2,084 per month. Stipends for part-time residents will be prorated on the full-time scale.

If the resident is entitled to receive sabbatical salary, leave pay, or compensation through some other arrangement, the stipend will be reduced accordingly. In no case will the Foundation award a total stipend of less than $1,200 to a full-time resident. Residents whose annual income exceeds the Foundation's maximum stipend of $25,000 will be permitted to accept supplementary pay from their host organization or other source to bring their total income during tenure up to their income level as of May 31, 1979. Applicants requesting a stipend to match their current income will be required to provide verification of annual base pay and available pay from their home institution; self-employed applicants will be required to provide evidence of their current income level.

Travel Allowance. An applicant may request a travel allowance to aid in defraying travel costs to the host organization, if reimbursement is not received from other sources. The travel allowance will be based on the mileage from the applicant's residence as of February 15, 1979, to the host organization and return, unless the actual distance traveled is shorter. No travel allowance will be paid if the distance between the two points is less than 200 miles. If the resident associates with more than one host organization during tenure, the travel allowance will be calculated on the distance to the farthest institution. Only one round-trip travel allowance will be paid regardless of the number of tenure segments. The travel allowance will be computed for the most direct route, as determined from standard mileage tables, at the rate of 8 cents per mile for the resident, 4 cents per mile for an accompanying spouse, and 3 cents per mile for each of up to two accompanying dependent children.

Applicants may also request funds for travel to be conducted as an integral part of their residency activities. The proposal should contain full justification for the use of travel funds; based on the justification provided, the NSF may determine to provide a reduced allowance. A maximum of $500 or 5 percent of the stipend (whichever is less) will be made available for this purpose.

Activities Support Allowance. On behalf of the resident the Foundation will make available to the host organization an activities support allowance not to exceed $3,000 per year ($250 per month). This allowance will be provided by the Foundation directly to the host organization, to defray the costs of the resident's activities program; instructions for requesting this allowance will be sent to the resident and host organization at the time of award. This allowance should not be used to support the writing, printing, or dissemination of materials that are intended primarily to promulgate the policy positions of the host organization. The project plan must contain full justification for the amount requested; based on the justification provided, the NSF may determine to provide a reduced allowance. Activities support allowances will be prorated for part-time residents.

REPORTS

Residents are required to submit quarterly reports and a final report to the Foundation. Quarterly reports, which must be submit within 15 days of completion of each 90-day period of tenure, may be brief and informal summaries of activities and accomplishments. Final reports, which must be submitted within 30 days of completion of tenure, are intended to help the Foundation and the public evaluate the success of individual residency activities and the program as a whole, and should contain full and reflective summaries of residency experiences. Host organizations are also asked to submit informal final reports and to indicate their willingness to do so at the time the application is submitted. The Foundation will make project summaries and reports prepared by successful applicants available to the public. Additional information on reports will be sent to residents and their host organizations at the time awards are made.

CONDITIONS OF APPOINTMENT

Residents are expected to adhere to the programs for which their grants are awarded. After an award is made, a change in the project plan, tenure, time commitment, or host organization must receive the prior approval of the National Science Foundation.

Residencies are subject to termination if unresolvable problems arise in achieving their objectives or if the approved project is discontinued prior to its completion. Termination action may be initiated by the resident, the host organization, or the National Science Foundation.

All materials produced by residents during their tenure are considered public documents and should be disseminated as widely as possible. Residents must submit to the Foundation all materials or reports prepared for the host organization, as well as copies of any publications produced during the tenure period.

This Announcement sets forth the basic conditions of appointment. In addition, residency awards are made subject to the provisions in the publication entitled *Information for Public Service Science Residents and Host Organizations* (SE 79-61G) (and any subsequent amendments thereto), which will be mailed to successful applicants and their host organizations.

EVALUATION AND SELECTION

The evaluation of applications will be based on (1) the academic and professional abilities of the proposed resident, as evidenced by academic and professional history, letters of reference, and other indications of scientific and public service activities and competence, and (2) the potential contribution of the proposed activities to enhancing the level of public understanding and helping citizens to reach informed decisions on matters of public concern that involve science and technology, as evidenced by the proposals and the statements of the host organizations.

Applications will be screened initially by SFC program staff for completeness and conformity with program requirements and then will be submitted to peer review. Each review panel will consist of scientists and nonscientists knowledgeable about programs in which citizens and scientists work together on science-related policy issues. Panel members will also be selected to insure representation of appropriate scientific disciplines and of different points of view about the kinds of issues discussed in the applications. A copy of the criteria that will be used in reviewing applications appears in Appendix A.

APPLICATION MATERIALS

To be eligible for consideration an application must be submitted on forms provided by the Foundation. Application forms and instructions may be obtained from:

Public Service Science Residencies
Science for Citizens
Office of Science and Society
National Science Foundation
Washington, D.C. 20550

Application materials include a postcard that should be completed by persons who intend to submit an application for a residency. Applicants should return this postcard to the Foundation by January 15, 1979.

The deadline for filing applications is February 15, 1979. Applications received after that date may be excluded from the evaluation process. The Foundation expects to notify all applicants of the disposition of their applications in May 1979.

APPENDIX A

CRITERIA FOR REVIEWING APPLICATIONS

Public Service Science Residencies are intended to increase the knowledgeable participation of scientists and citizens in resolving major issues of public policy that involve science and technology, and to make scientific and technical assistance available to citizens and citizen groups at the times and in the ways most useful to them.

Each eligible application will be reviewed by a panel consisting of scientists and nonscientists knowledgeable about programs in which citizens and scientists work together on science-related policy issues. The general criteria listed below will be supplied to the panelists to guide them in evaluating and ranking applications. In making awards, the Foundation will try to achieve balance and diversity among applications of substantially equal merit by considering type and focus of activity, type of host organization, geographical location, and sex and minority status of the applicant.

1. *Rationale*. Are the project objectives clear and relevant to SFC goals as stated? Does the project plan adequately identify problems and issues of concern to specific communities? Has the applicant demonstrated familiarity with the scientific and technological aspects and social implications of the issues? Does the need for the project justify the investment of Federal funds?
2. *Plan of Work and Evaluation*. Does the project plan offer a coherent and well-formulated plan of attack? Is the proposed approach practical and effective? Does the plan demonstrate familiarity with relevant work in the geographic and subject areas of the proposed project? Is the applicant's time commitment to the project adequate? Are the management and dissemination plans well conceived? Are effective procedures proposed for assessing the success of the project?
3. *Host Organization*. Does the host organization normally lack access to scientific expertise? Would the host be able to support these activities itself? Will it make effective use of the applicant's activities? Is the host organization prepared to undertake appropriate dissemination and follow-up activities or initiate related activities upon completion of the residency?
5. *Audience*. Are the groups and constituencies that will be affected by the project clearly identified? Are the activities directed at groups that normally lack access to scientific and technical assistance, e.g., minority groups, the poor, those with little formal education?
6. *Balance*. Does the applicant exhibit scientific objectivity and independence of mind? Is the project free from any explicit or implicit attempt to support an already-determined policy position? Is there provision for broad and impartial dissemination of results to all interested parties?
7. *Impact*. Is there evidence that the project is needed by the groups addressed and will be useful to them? Will the project explore innovative approaches that might be transferred or adapted to other settings?
8. *Costs*. Are the requests for project-related travel and activities support allowances reasonable?
9. *Overall Quality*. Taking the project as a whole, does it have high intrinsic merit? Are the proposed activities exciting and imaginatively conceived? Are they likely to be executed flexibly and responsively? Will the results significantly advance SFC objectives?

APPENDIX B

PUBLIC SERVICE SCIENCE RESIDENTS FY 1978

Name	Major Field	Host Organization
Dr. Alan H. Ackerman Tsaile, AZ	Nutrition and Metabolism	The Navajo Nation Window Rock, AZ, and Colorado State University Ft. Collins, CO

To analyze information on the nutritional status of Native Americans and existing public policies intended to reduce malnutrition on the reservations, and to conduct training sessions on health and nutrition policy for Native American decisionmakers.

Mr. William D. Austin Chapel Hill, NC	Occupational Health	North Carolina Occupational Safety and Health Project Durham, NC

To organize existing occupational health data and predict health effects of existing and past exposure to the most serious of North Carolina occupational health hazards, and to disseminate information through leaflets and workshops.

Dr. David W. Bartelt Glassboro, NJ	Sociology	Institute for the Study of Civic Values Philadelphia, PA

To involve Philadelphia area neighborhood and civic organizations in the research aspects of urban development policy issues by providing training to local leaders, and to conduct research on housing policy issues.

Dr. John W. Born Weeks Mills, ME	Ecology	Natural Resources Council of Maine Augusta, ME

To help citizens understand the effects of modern farming and forestry practices on the state's natural resources through a series of regional meetings.

Dr. Carolyn Broughton Auburn, AL	Microbiology	Alabama National Organization for Women Montgomery, AL

To compile information on the availability of medical care, for women and infants in six Alabama locations, and to prepare readily understandable information on women's health problems to be presented at meetings.

Dr. Marva S. Browne St. Thomas, VI	Nutrition and Metabolism	Island Resources Foundation St. Thomas, Virgin Islands

To develop a nutrition education program for tenant groups and civic associations, education personnel, decisionmakers and the general public, through workshops, newsletters and the media.

Dr. Susan Brutto Lebanon, KY	Cultural Anthropology	Central Kentucky Community Action Council Lebanon, KY

To collect health-related data and develop informal educational programs to disseminate medical information to elderly citizens of rural central Kentucky through radio, newspapers, nutrition sites and Senior Citizens Clubs.

Mr. Joe W. Conner San Diego, CA	Biochemistry	Community Service Center University of Southern California Los Angeles, CA

To produce a science and technology symposium to encourage the involvement of the black community of metropolitan Los Angeles in a discussion of scientific issues relevant to inner city residents.

Dr. Elaine M. Earl Wadsworth, OH	Organic Chemistry	Association of California Public Radio Stations Sacramento, CA

To produce and moderate bilingual public radio programs focused on scientific issues in proposed state legislation and in Federal legislation affecting California.

Dr. Marc A. Eichen Middlebury, VT	Geography	Total Environmental Action Foundation Harrisville, NH

To identify, assess, and disseminate information on self-help energy conservation measures in residential space and water heating to the rural poor and lower middle income groups in northern New England.

Dr. Daniel Goldrich Eugene, OR	Political Science	Whiteaker Community Council Eugene, OR

To develop educational outreach projects to assist a low income community in dealing with problems related to housing, economic development, energy and resources, and the elderly.

Dr. Derrick P. Grimmer Los Alamos, NM	Physics	Environmentally Appropriate Technology Fremont, MO

To conduct workshops and prepare a guide on winterization retrofit techniques to assist the rural poor in conserving energy.

Ms. Lynne Z. Hale Fairbanks,AK	Biological Oceanography	Arctic Environmental Information and Data Center Anchorage, AK

To develop and interpret environmental and resource management information to be used by the region's Native population in regional planning activities.

Dr. Edet E. Inwang Chicago, IL	Pharmacology	Austin Community Developmental Center Chicago, IL

To develop an educational program on the nature and use of common drugs, to help prevent their abuse and misuse.

Dr. Russell M. Lidman Olympia, WA	Economics	Washington Association of Community Action Agencies Olympia, WA

To conduct workshops designed to help citizens to examine and evaluate proposals to restructure the state tax system.

Dr. Clair W. Matz, Jr. Huntington, WV	Political Science	Detroit Conference of the United Methodist Church Detroit, MI

To develop educational materials about world hunger that will enable churches and the general public to evaluate policies intended to deal with the problem.

Dr. Rose A. McCullough Lincoln, NE	Microbiology	Nebraska Chapter and Northern Great Plains Sierra Club Lander, WY

To assess the potential effect of nitrate-nitrogen concentrations in groundwater on public health and on the suitability of the groundwater resource to meet its intended uses, and to hold workshops to present information and encourage citizen input into state legislation.

Dr. James P. Pitts Evanston, IL	Sociology	Center for Neighborhood Technology Chicago, IL

To assist urban community-based organizations in developing their capacities to assess, incorporate, and control appropriate small-scale technologies in the interest of local community development.

Dr. Leonard S. Rodberg Washington, DC	Physics	National Association of Neighborhoods Washington, DC

To assist neighborhood organizations to implement energy conservation and solar energy conversion measures, through handbooks, workshops, and technical assistance.

Mr. Dinesh C. Sharma Ft. Meyers, FL	Environmental Resources Planning	The Conservation Foundation Washington, DC and Sanibel, FL

To encourage educated land use policy decisions and increase public understanding of the barrier islands system, through workshops and brochures.

Mr. Merle G. Sheffield Randolph, NY	Physics	Cattaraugus Community Action Little Valley, NY

To establish a public center for information on energy conservation and alternate energy sources, and to disseminate information through meetings, newsletters, and newspaper articles.

Dr. Christopher Smith Norman, OK	Geography	Mental Health Association in Oklahoma County Oklahoma City, OK

To compile and disseminate information on problems faced by de-institutionalized mental patients, through newspaper articles, information pamphlets, and a resource directory.

Mr. Charles van Hook Helena, MT	Environmental Sciences	Environmental Information Center Helena, MT

To analyze the future ecological implications of current and proposed State and Federal mining and reclamation laws.

Mr. Allen E. Williams Seattle, WA	Developmental Psychology	Seattle Office of Neighborhood Planning, and SeattleWorks Seattle, WA

To develop a Data Ombudsman service to enable citizen groups to participate in the local policymaking process by effective use of existing data resources of the city of Seattle and State and Federal agencies.

Dr. Grace E. Ziem Baltimore, MD	Occupational Health	Maryland State and DC AFL-CIO Council Baltimore, MD

To develop a union-maintained record system on health hazards and health status, and to initiate a worker education program on occupational health.

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